

REMARKS

Claims 1-12 are currently pending in the application, with claims 1, 4, and 7 being independent. Claims 1-2 and 4-6 have been amended to better define the present invention. Claims 7-12 have been added to define additional aspects of the invention.

Claim Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1-6 under 35 USC §102(e) as being anticipated by USP 6,647,061 B1 to Panusopone et al. ("Panusopone"). Applicants respectfully traverse this rejection because the reference cited by the Examiner fails to disclose each and every element as recited in the claims.

Regarding claims 1 and 4, Panusopone provides a bit rate transcoding apparatus which converts a precompressed bitstream into another compressed bitstream having a different bit rate. A cascaded-base transcoder is disclosed which reuses motion vector from the input bitstream and thus eliminates the motion estimation step to improve the efficiency of the transcoding. (See column 4, lines 29-43.) Panusopone initially accepts an MPEG-2 encoded bitstream for video decoding to produce an uncompressed video data stream. (See column 7, lines 32-44; Figure 4A, 425.) Motion vector data is generated from the uncompressed video stream using the MV decoder 425. The decoded bitstream is then re-encoded into the MPEG-4 format, wherein the motion compensation function 440 utilizes motion vector data from MV decoder 425 which was derived from the uncompressed bitstream. (See column 7, lines 45-60; Figure 4B.)

Panusopone further discloses encoding motion vectors from the MPEG-2 format to the MPEG-4 format (column 14, lines 56-60). Specifically, Panusopone discloses estimating of a motion vector of the resized macro block by using motion vectors of four (4) original macro blocks

without actually performing motion estimation. Panusopone then determines a new motion vector by utilizing weighted averages or a maximum average correlation technique. (See column 17, line 57 through column 18, line 34.)

Conversely, Panusopone fails to disclose, at least, “a motion compensation unit which generates the motion vector information in the MPEG-4 format if a number of macro blocks having non-zero motion vector information exceeds a threshold ...,” as recited in claim 1. (Emphasis added.)

In the motion vector conversion disclosed by Panusopone, the number of macro blocks in the MPEG-2 format having no motion vector is not accounted for. Panusopone merely discloses a variety of different techniques using weighted averages to predict the new motion vector for the MPEG-4 macro block. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 1. Claims 2 and 3 depend from claim 1 and are therefore allowable at least by virtue of their dependency from allowable claim 1.

Claim 4 includes recitations similar to claim 1 and therefore are allowable at least for the reasons provided above for allowable claim 1. Claims 5 and 6, at least by virtue of their dependency from allowable claim 4, are also allowable. Applicants therefore respectfully request the Examiner to also withdraw the rejections of claims 4-6.

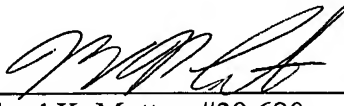
Conclusion


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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